



# **Federal Manufacturing & Technologies/ Kansas City (FM&T/KC)**

**Report from the DOE  
Voluntary Protection Program  
Recertification Review,  
May 16 - 19, 2005**



U.S. Department of Energy  
Office of Environment, Safety and Health

Office of Corporate Performance Assessment  
Office of Quality Assurance Programs  
Washington, D.C. 20585

**July 2005**



DOE/EH – 0698



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*“...Some of us will serve in government for a season; others will spend an entire career here. But all of us should dedicate ourselves to great goals: We are not here to mark time, but to make progress, to achieve results, and to leave a record of excellence.”*

-- **George W. Bush**  
**President of the United States**  
**October 15, 2001**  
**Constitution Hall, Washington, DC**



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# Abbreviations and Acronyms

<b>AED</b>	automated external defibrillator
<b>BLS</b>	Bureau of Labor Statistics
<b>CAIRS</b>	DOE Computer Accident/Incident Reporting System
<b>CSP</b>	Certified Safety Professionals
<b>DOE</b>	U.S. Department of Energy
<b>DOE-VPP</b>	U.S. Department of Energy Voluntary Protection Program
<b>ESAP</b>	Environmental Self-Assessment Program
<b>ES&amp;H</b>	Environment, Safety and Health
<b>FE/HQ</b>	Office of Fossil Energy
<b>FES</b>	Facilities Engineering Services
<b>FM&amp;T/KC</b>	Federal Manufacturing & Technologies/Kansas City
<b>HQ/EH</b>	Office of Environment, Safety and Health
<b>ISMS</b>	Integrated Safety Management System
<b>JHA</b>	Job Hazard Analysis
<b>KCSO</b>	Kansas City Site Office
<b>MOPS</b>	Management Observing & Promoting Safety Program
<b>NNSA</b>	National Nuclear Security Agency
<b>OSHA</b>	U.S. Department of Labor's Occupational Safety and Health Administration
<b>PPE</b>	Personal Protective Equipment
<b>S&amp;H</b>	Safety and Health
<b>SHINE</b>	Safety & Housekeeping Implementation Needs Everyone Program
<b>SPFPA</b>	International Union of Security, Police and Fire Professionals of America
<b>SSA</b>	Site Safety Assessment
<b>VPP</b>	Voluntary Protection Program



## Executive Summary

The Department of Energy (DOE) Voluntary Protection Program (VPP) onsite review of Federal Manufacturing & Technologies/ Kansas City (FM&T/KC) for STAR recertification was conducted from May 16-19, 2005 at the Honeywell International facility in Kansas City, Missouri. FM&T/KC originally achieved STAR in March 1996 and was re-certified in 1999 and 2002. The Team found the STAR quality of performance remains strong at FM&T/KC. The following summarizes the review team's observations and analysis.

### *Management Leadership*

The Team found a high degree of management commitment to safety and health (S&H) by FM&T/KC, Honeywell management. At FM&T/KC, managers at all levels are personally committed to the VPP and such commitment is clearly demonstrated in their day-to-day interaction with the staff. Observations and interviews demonstrated that their leadership is capable, competent and well directed. Overall, the team found VPP leadership (top management through first-line supervision) fully executed. The President and other managers visibly participate in safety programs, and they have successfully implemented the Department's Integrated Safety Management System (ISMS) requirement and the tenets of VPP. FM&T/KC management advocates that all accidents can be avoided, and they encourage a safety culture based on this "zero accident" philosophy. The management staff considers VPP as directly complementary of the DOE ISMS requirement and an effective metric to gauge the success of ISMS implementation.

FM&T/KC continues to satisfy the VPP requirements for Management Commitment.

### *Employee Involvement*

Associates are passionate about their work, the company, their community and their coworkers. They are mature, well seasoned, well qualified, and competent. They are aware of the hazards of their job(s) and how these hazards are mitigated. The team found that the workers at FM&T/KC are cooperative and ready to follow safety and health procedures and processes. Associates understand that they have "Stop Work" authority if unsafe conditions exist. They have no fear of reprisal and are ready to raise safety issues through a variety of communication means. They continue to think in terms of each other's safety during work execution. The current focus is on achieving greater associate intervention on the job for the safety of co-workers.

Associates are comfortable in their participation in all aspects of the safety program. Bargaining unit associates are equally confident of effective safety communications with co-workers and management. Associates are aware of their rights and responsibilities, and feel empowered as owners. They are proud of their worksite and feel safety is a priority in performing work.

The aging workforce introduces new challenges for associate hazard recognition, safety communications, and task execution.

They continue to satisfy the VPP requirements for Employee Involvement.

### ***Worksite Analyses***

The VPP onsite review team found that FM&T/KC satisfies the requirements of DOE-VPP criteria. The team did, however, identify some significant concerns related to worksite analysis processes. The VPP recertification team identified a deficiency in FM&T/KC's ability to identify serious hazards associated with machine guarding press brakes, mechanical metal shears, and spray paint booths. In addition, the team identified weaknesses in FM&T/KC's hazard analysis process for Operations activities and the flowdown to control information to employees. The team is aware of the OA-1 finding in this area and feels the satisfactory completion of the corrective action plan for the OA finding will result in needed improvements to the program. The team felt the hazards analysis process for maintenance and construction was effective.

The SHINE process was judged to be a very effective method for assuring comprehensive ESH reviews of all work areas. In addition, incident analysis and lessons learned processes were fully developed and implemented. The site has established trending of injury and non-injury safety & health data; results are used for continuous improvement action development; results are communicated to associates. Associates are provided several routes for reporting their ESH concerns and interviews validated their confidence in the system and their ability to report concerns without reprisal.

### ***Hazard Prevention and Control***

The Team found that FM&T/KC satisfies the requirements of hazard prevention and control. It noted that associates actively participate in identifying and controlling hazards, and feel that VPP empowers them to control their own safety and they have no fear of reprisal for raising safety concerns. Hazards are identified and mitigated appropriately, and adequate controls are in place to prevent injuries, as evidenced by low injury rates.

### ***Safety and Health Training***

They continue to exceed all safety and health training requirements. The result of interviews with both management and associates shows that S&H training is comprehensive at this facility. It addresses all managers, associates, and contractors. The electronic tracking system ensures that no associate misses training and that all training is kept up-to-date.

### ***Conclusion***

The Team concludes that they have satisfied the requirements for participation in DOE-VPP, and recommends that DOE approve the recertification to STAR.

# I. Introduction

The DOE-VPP onsite review of Federal Manufacturing and Technologies/ Kansas City FM&T/KC for recertification was conducted from May 16, 2005 thru May 19, 2005 at the Honeywell facility in Kansas City Missouri. FM&T/KC is a facility that performs manufacturing for the National Nuclear Security Agency (NNSA) at the Department of Energy in Kansas City, Mo. It is operated by Honeywell International LLC. The Department of Energy's Kansas City Site Office (KCSO) in Kansas City, Missouri has oversight responsibility and provides guidance to FM&T/KC on a regular basis.

This facility is geographically centered on a 141 acre site as a 3.2 million square foot facility located 12 miles south of the city center of Kansas City, Missouri. It produces a variety of non nuclear items such as electrical products, plastics and various metal components to support the NNSA missions. There are approximately 2,700 associates and a \$360 million annual budget. The STAR level recognition was initially awarded to the site in March 1996 and recertified STAR in August 1999 and August 2002. There are two unions representing approximately 1,100. The International Association of Machinists and Aerospace Workers is the larger union and represents about 945 of these associates. The International Union of Security, Police and Fire Professionals of America (SPFPA) represent the balance of about 86 associates.

The Team evaluated the safety programs of FM&T/KC against the Protocol for DOE-VPP Star Site Recertification of the DOE-VPP. The DOE-VPP recertification review team (Team) consisted of three safety professionals from the DOE Headquarters: two from the Office of Environment, Safety and Health (HQ/EH) and one from the Office of Fossil Energy (FE/HQ), three DOE safety professionals from the NNSA Service Center, the Y-12 Site Office and the KC Site Office, a VPP Manager from the Occupational and Safety Administration (OSHA) Region VII Office, two DOE contractor employees from Richland, Washington and an observer from Facilities Engineering Services (FES). (See Appendix for a roster of the Team). During the site visit, the Team reviewed relevant safety documents and conducted interviews of approximately 150 associates (both bargaining and non-bargaining unit) and management to evaluate and verify the information necessary to perform the recertification review.



## II. Injury and Illness Rate Information and Trends

A review of the Occupational Safety and Health Administration (OSHA) 200/300 logs was performed. The rates below include all FM&T/KC associates.

INJURY AND ILLNESS DATA FOR the FM&T/KC					
Calendar Year	Lost Workday Cases	Total Recordable Cases	Employee Hours	Lost Workday Case Incident Rate	Total Recordable Case Incident Rate
2002			5,277,695	0.19	0.61
2003			5,156,836	0.04	0.31
2004			5,140,249	0.23	0.39
3-Year Average			5,191,593	0.15	0.44
Bureau of Labor Statistics (BLS) 3 yr average for NAICS (3344)				2.6	1.4
FM&T/KC percent below BLS rate					

The information on the OSHA 200/300 logs supports the data provided in FM&T/KC's self-evaluations, the organization's first report of injury forms and other recordkeeping documents. A Honeywell health and safety professional is responsible for chairing a team of ES&H and Medical professionals for classifying all injuries and illnesses for OSHA recording and is responsible for maintaining the OSHA log. Injury/illness data is submitted for inclusion in the DOE HQ Computerized Accident/Incident Reporting System (CAIRS). Routinely, the data output from CAIRS is checked against the actual data reported and submitted. This ensures that accurate information is being presented in the CAIRS database. The staff understands the recordkeeping requirements, including the 29 CFR 1904 recordkeeping changes that went into effect in January 2002.





### III. Summary of Performance Related to VPP Tenets and Sub-elements

The level of management leadership, associate involvement, worksite analysis, hazard prevention & control, and safety & health training found at this site meet or exceed DOE-VPP criteria for STAR level recognition. The sub-elements of the tenets and an evaluation of the FM&T/KC performance in selected areas are addressed and described below.

#### *Management Leadership*

The commitment of management and staff members at Federal Manufacturing & Technologies/ Kansas City (FM&T/KC) is demonstrated in the strong safety and health policy statements, allocation of resources necessary to support all safety and health programs. Since receiving their second DOE-VPP recertification in 2002, Honeywell FM&T has continued to hold managers accountable for and focus on safety as a priority.

Managers have devoted attention to associate-identified safety and health concerns, and active participation in safety committee activities. FM&T/KC management demonstrates its commitment to a safe and healthful workplace for all associates through the effective implementation of ISMS and VPP. Additionally, top-level management from the FM&T/KC is clearly visible in the work place and actively participates in their safety and health program.

They are organized to support roles, responsibilities, and policies. Roles and responsibilities for associates and managers are identified in position descriptions and the labor bargaining agreements. Accountability is demonstrated in performance evaluations for non-bargaining unit associates and managers, in accordance with the union agreement for bargaining unit associates. Managers stated that resources are budgeted and allocated at sufficient levels.

An integrated framework has been established to provide a template to ensure the S&H planning process is comprehensive. Their comprehensive ES&H self assessment which is conducted is reported in the VPP Annual Reports. The annual reports include description status of goals and objectives for the reporting period and those established for next year. These annual program evaluations have been conducted using VPP criteria, ISMS core functions and guiding principles. The results of annual program evaluations and other S&H trending data are used by FM&T/KC to develop improvement strategies/actions for the coming year. Associate orientations are well developed and implemented effectively at all levels, including associate notification of the FM&T/KC's participation in VPP.

In June 2003, FM&T/KC consolidated its Environmental Self-assessment program (ESAP), Management Observing & Promoting Safety (MOPS) Program and annual ES&H tours into the one program called Safety & Housekeeping Implementation Needs Everyone (SHINE) program. SHINE has full support of KCP managers and associates.

During the 2004 winter season KCP experienced ten injuries related to slips, trips and falls during winter weather conditions. This generated concern at F&MT/KC, KCSO, and DOE /HQ. The Winter Weather Pedestrian Safety Improvement Program is designed to avoid a repeat in 2005 and beyond. The program includes use of weather forecast, weather patrol consisting of KCP managers and associates, and a snow removal contractor to help associates better enable plant access during icy conditions.

SHINE and the Winter Weather Pedestrian Safety Improvement Program are examples of continuous improvement at KCP.

The Team concluded that FM&T/KC fully satisfies the requirements of the Management Leadership tenet and its sub-elements as described above.

### ***Employee Involvement***

The information gathered for this portion of the report relies heavily on observations of associates in the workplace while conducting their routine duties, and on interviews of associates. Associates overwhelmingly feel that they own a dynamic safety culture. Associates at all levels feel comfortable to raise concerns and willingly participate in their resolution. Associates in the bargaining unit feel that barriers to communication to and from management are minimal. All- associate communications are regarded as very effective.

FM&T/KCP associates' general feeling is that KCP is a safe place to work. Typical comments heard throughout the week included "this is the safest place I have ever worked" and "VPP provides me with the right to get the protection needed to do the job safely." The general theme during discussions with associates was that Management is committed to safety and that the associates have full management support. Another commenter indicated that VPP has created an awareness of safety both at work and at home. An example of this program was the annual Safety Fair that was held on May 18, in which associates were provided information on safety with various home safety issues including electrical; automobile tire care; yard safety; and mosquito born diseases.

One request heard from associates was to get more feedback on the annual emergency evacuation drills. The feeling was that the only feedback provided on the drills was when something went wrong. This individual would like to get feedback on what went well with the drill. Another commenter suggested that more attention be given to the changing work life program. As an individual's abilities change (eye-sight, dexterity, mobility, etc.), attention needs to be given to items such as work station lighting, universal access, lighting in stairwells, etc. Another suggestion was to provide a training program on increasing awareness of each associates surroundings. The concern was expressed in terms of walking in the various aisle ways in the same areas used by fork lift and work cart traffic. Even though the pedestrians have the right-of-way, they need to be aware of other traffic.

Associates were candid and showed no fear in talking with the Team during interviews. The Team interviewed approximately forty associates, both bargaining and non-bargaining unit associates and management. All associates indicated that they understood their rights and responsibilities, and are very knowledgeable about their specific responsibilities regarding safety and health. Interviews confirmed that a strong safety culture exists at all levels, and associates feel empowered to voice safety concerns. They are proud of their worksite and feel safety is a priority in performing work. An area for further improvement would be increasing associate intervention with co-associates. Different approaches have been used such as the "Safety Buck," but further means to encourage and foster associate intervention are continuously under review.

The operating associate communication systems are well developed. In particular, safety concerns reporting process has received significant improvements and remains effective and comprehensive. Additional trending of the lower significance concerns are currently under review for a more concise forecasting of generic hazards.

The impact of an aging workforce population will introduce new challenges for associate hazard recognition, safety communications, and task execution. A "Changing Workforce" team has examined

this issue and has made recommendations to management. These recommendations are under review for potential implementation.

The FM&T/KC fully satisfies the requirements of the Employee Involvement tenet and its sub-elements as described above.

### ***Worksite Analysis***

FM&T/KC routinely analyzes all new or modified facility designs, operations, and processes to identify and mitigate potential hazards before work is started. All changes to existing operations, including construction, are subjected to a Preliminary Hazard Analysis that identifies the work to be done, associated hazards, and specific controls for those hazards. In addition, an Activity Hazards Analysis is also conducted on all construction projects just prior to start of work to assure that all potential ESH concerns have been identified and controls will be in place prior to the start of work. FM&T/KC also performs a Beneficial Occupancy Inspection of all construction or remodeling projects to identify and address any ESH concerns prior to occupancy.

Hazards associated with maintenance work activities are evaluated by maintenance planners with support of ES&H personnel as appropriate. The FM&T/KC MAXIMO system provides for identification of hazards and controls on the work instruction provided to the crafts associates who will perform the work. The MAXIMO ticket lists all hazards expected to be encountered along with necessary work permits and personal protective equipment needed for the work.

FM&T/KC performs comprehensive hazard surveys of the entire facility every quarter. The Safety and Health Implementation Needs Everyone (SHINE) program involves FM&T/KC managers, associates and ESH professionals in a routine inspection of their work areas. SHINE was implemented in mid 2003, and incorporated several previous self-assessment programs. Safety and health concerns identified during the SHINE tours are tracked until corrected and followed up during the next quarterly tour. Construction projects are also reviewed under the SHINE process routinely. Comprehensive industrial hygiene surveys are managed by the ESH department and routine monitoring of hazardous operations is scheduled throughout the year. As many operations are conducted on an as needed basis, there is coordination between operations managers and the industrial hygiene organization to assure that monitoring is conducted when operations are scheduled. However, the VPP recertification team identified a deficiency in FM&T/KC ability to identify serious hazards associated with machine guarding press brakes and mechanical metal shears in various locations in plant. Several serious hazards associated with the spray paint booth in the maintenance shop were also identified.

Job hazard analyses (JHA) for more hazardous operations are performed by the FM&T/KC ESH department in coordination with operations managers and associates; JHAs for lower hazard, more routine jobs may be conducted on a “voluntary” basis. JHAs are made available to associates via the FM&T/KC Webster site. DOE VPP requires all operations be analyzed for their inherent hazards, controls identified for those hazards and the information be made available to associates. The JHA process was reviewed by reading the JHA Process Description and Work Instructions, reviewing JHAs for selected operations, and discussions with ESH personnel and associates. The FM&T/KC JHA process identifies the major steps in performing hazard analysis, but does not provide adequate instruction in how to analyze the hazard identified in performance of the work and how to identify controls, nor does the FM&T/KC management system assure adequate information on hazard control is made available to the associate performing the work. This leads to noticeable differences in the completeness and quality of JHAs posted to Webster.

ES&H professionals have a lead role in hazards analysis for operational activities. Discussion with several ES&H staff and line management confirmed they understood conceptually how JHAs are

completed, but the team felt that instruction was incomplete and the process for flowing this information into work procedures is not clear. The process documents note that risk must be determined to allow identification of JHA to be conducted by ES&H, however, the steps for determining risk are not fully identified and referenced an outdated Site Safety Assessment (SSA). It was noted that the SSA is planned to be updated. Similarly in the JHA process, tools or techniques for identification of hazards and controls do not provide sufficient detail to ensure effective JHAs. Training discussions and a simple search of the training database does not show documentation of ES&H staff training in core topics needed to perform hazards identification and controls selection (e.g., risk assessment, hazards identification, control selection, and use of the JHA). Line management and operator application of the “voluntary JHA” process relies on ES&H support and will similarly have varying results when using this in specific JHA processes.

Team evaluation with regard to job hazard analysis is consistent with the OA observation of November 2004, regarding flowdown of controls into work documents and feel this deficiency should be remedied by completion of the FM&T/KC Final Corrective Action Plan for Finding OA-1.

Associates are encouraged and expected to identify and report conditions that compromise or are not in compliance with company S&H programs. It is clear that this process is in place and effective, providing an important “feedback element” of the process.

FM&T/KC systematically analyzes injury and near-miss events, including first-aid type injuries, and occurrences; a formal lessons learned program is in place. Trending of safety & health event data is performed regularly and communicated.

The FM&T/KC satisfies the requirements of the Worksite Analysis tenet with the exceptions of the items noted above and is encouraged to address them as soon as possible.

### ***Hazard Prevention & Control***

The FM&T/KC has an adequate number of certified safety professionals (CSP) industrial hygienists on staff. Certified S&H personnel in a variety of areas are also immediately available from their central safety organization. They have a strong safety and health infrastructure, and provide effective guidance and enforcement of safety requirements and compliance to safety policies. Associates stated that they receive excellent on-call support from the ES&H staff members, and feel they provide quality oversight and take appropriate actions to resolve issues.

Site policy regarding the use of personal protective equipment (PPE) is strong. PPE is made available including gloves, boots, safety glasses, hearing protection, and respirators. Where PPE is needed, those requirements are clearly delineated in associated work permits/documents (e.g. work orders, work instructions, JHA, etc.).

A Job Hazards Analysis process is in place and being utilized; however, some areas for improvement were found in the Job Hazard Analysis (JHA) program, such as:

- (1) Some of the JHAs reviewed did not identify (list) the hazard, but did have controls in place to mitigate the hazard. For example, the operation of solder pots instructs the worker to ensure the ventilation system is turned on, but it does not identify an inhalation hazard. It also did not provide instruction on how to check to ensure the ventilation system was operable.
- (2) JHAs are developed and utilized for high-hazard work. Routine work activities rely heavily upon skill of the craft. Due to the current seniority of the workers, this is not readily apparent because they are highly trained and skilled in their crafts; however, as more people retire from the workforce and new associates are hired in, this could become problematic.

Other methods of hazard control are in place, such as work document instructions, postings, mirrors, barriers, indicator lights, and marked areas for specific uses.

FM&T/KC has an adequate emergency preparedness program. They have a drill schedule in place through 2009. Employees are involved in an annual emergency drill/exercise, and the results of the drill are posted to their internal intranet website. Their employees follow the requirements of “host” facilities regarding radiation protection training and program requirements.

The medical program at FM&T/KC is founded on a well-established and close relationship with the Site Occupational Medicine organization. Their policies and procedures are based on appropriate DOE contract clauses, orders, contract documents, and industry standards. Employee feedback indicated the medical staff provides good, timely, and sufficient care, and effective medical monitoring. One area for improvement in the medical program is the availability of Automatic External Defibrillator (AED) units. Currently, there are only 3 AEDs available for use for a workforce of just under 3,000 associates. Considering the size and complexity of the plant, and the average age of the workers, it is strongly recommended that more AEDs be made available for use.

The overall opinion of the workforce, based on individual interviews, is that workers feel empowered and have control over their own safety; they do not have any fear of reprisal for raising safety concerns, and they strongly believe that management puts safety first. In some instances, workers did mention that they believe there are a few mid-level managers who place production over safety, but that they were few and not indicative of the norm. Workers also stated that they are provided multiple avenues for involvement in safety, such as safety committees, JHA development, awareness committees, and steering committees.

The FM&T/KC satisfies the requirements of the Hazard Prevention & Control tenet and its sub-elements as described above, but does have areas for improvement.

### ***Safety & Health Training***

The safety & health training processes used at the FM&T/KC are structured and implemented according to ISM core functions and guiding principles; these processes adequately train workers, supervisors, and managers in recognizing hazards and performing work safely. Associates who were interviewed during this review, as well as observations made by the Team, confirmed that these processes are used and understood by their associates throughout the organization.

The FM&T has made a concerted effort to train associates not only on the hazards they face at work but also on hazards that associates face at home. Some topics of training for home safety and health include vehicular safety, fire safety, hunting safety, and electrical hazard safety. Associates interviewed stated that they were very impressed with this level of safety training. Many associates remarked that they had changed their safety practices at home due to the training received at FM&T/KC.

The computerized training tracking system, Electronic Learning Management System (eLMS), is exemplary. This system tracks each individual associate’s training and notifies them 45 days in advance of a training due date. A further description of this system is contained in the “Best Practices” section.

The FM&T/KC fully satisfies the requirements of the Safety & Health Training tenet and its sub-elements as described above.



## IV. Outreach

The FM&T/KC outreach effort has been strong and consistent throughout the past two years. The Team and the annual VPP Status report identified several ongoing programs. Listed below are a few that are commendable.

- FM&T/KC conducted a “VPP 101” course in March 2003. The VPP 101 course is a half-day course designed to introduce prospective applicants to the VPP process. FM&T management, labor (International Association of Machinists and Aerospace Workers) representatives, and the local OSHA VPP Manager conducted the course. The course was designed by FM&T personnel. There were 25 attendees present representing 11 different companies. One participant company has successfully completed the application process and recently become a STAR site. Several other participants are currently in the application process.
- OSHA Region VII and VPPPA Conference Attendance
- Central Missouri State University, Warrensburg, Missouri – VPP Educational Presentation
- General Electric Engine Services, Topeka, Kansas - VPP Application Support
- Oak Ridge Institute for Science and Education, Oak Ridge, Tennessee – VPP STAR Certification Support
- Federal Manufacturing & Technologies/ New Mexico – Albuquerque, New Mexico – VPP STAR certification support





## V. Strengths

During this review, the Team noted several strengths within the FM&T/KC that are indicative of a healthy and comprehensive safety culture. The ISMS principles and methodologies are evident in these behaviors and practices, and illustrate the depth and scope to which their values the five main tenets of VPP. Listed below are the strengths noted by Team members during this review.

1. FM&T/KC exhibits a strong safety culture.
2. Management is very responsive to safety concerns – MAXIMO
3. Mechanical Power Press Guarding
4. SHINE
5. Accident/Injury Reporting Statistics
6. Associate Accountability - Salaried associate performance appraisals – ESH element
7. Enthusiastic employee involvement in safety programs, multiple avenues for involvement, and strong management support.
8. Collaborative relationship between management and workers, including no fear of reprisal for raising safety issues.
9. Strong ES&H support and technical expertise.



## VI. Best Practices

The Team commends the FM&T/KC for its continuation as a STAR participant in the Department of Energy Voluntary Protection Program. The Team recognized a majority of their ES&H programs as long term assets, which provide excellent value and sufficient worker and management involvement. Their ES&H programs effectively integrate and implement best practices which have allowed associate involvement to evolve and stabilize a strong safety culture. Examples of FM&T/KC best practice programs and processes are:

1. eLMS
2. Ergonomics
3. Extending “Safety Lifestyle” to Home
4. FM&T/KC safety awareness campaign includes home safety.
5. Subcontractor prequalification and performance incentives.
6. Safety Campaigns, e.g. Don’t Gamble With Safety
7. Onsite Transportation Safety program
8. SHINE



## VII. Areas for Improvement

Although the Team recognizes that the FM&T/KC has implemented many good programs and practices, as with any healthy continuous improvement program, there are areas for improvement within the safety arena. The Team noted the following opportunities for improvement:

1. Hazard recognition of machine guards
2. Availability of AEDs
3. Hazard analysis for production operations
4. Post-task performance debriefing
5. Aging Workforce Impacts on safety
6. Posting of asbestos hazards on the roof.



## VIII. Conclusion

The Team found that the FM&T/KC continues to meet and maintain a safety and health program addressing the basic tenets of DOE-VPP. The Team recommends that the FM&T/KC be recertified as a STAR.





# Appendix A

## DOE-VPP Review Team

The Federal Manufacturing & Technologies/ Kansas City  
May 16-19, 2005

Name	Contact Information	Organization	Area(s) of Responsibility
Steve Singal	301-903-2990 <a href="mailto:steve.singal@hq.doe.gov">steve.singal@hq.doe.gov</a>	DOE/EH - 31	Team Leader: Management Commitment
Rex J. Bowser	301-903-2641 <a href="mailto:rex.bowser@hq.doe.gov">rex.bowser@hq.doe.gov</a>	DOE/EH - 31	Asst. Team Leader: Employee Involvement
Don Harvey	301-903-7317 <a href="mailto:Don.harvey@hq.doe.gov">Don.harvey@hq.doe.gov</a>	DOE/FE - 7	Worksite Analysis
Matt Gaines	816-426-5230 ext 247 <a href="mailto:gaines.matt@dol.gov">gaines.matt@dol.gov</a>	OSHA Region VII	Safety and Health Training
Susan Dyer Morris	865-576-3545 <a href="mailto:morrisd@yso.doe.gov">morrisd@yso.doe.gov</a>	DOE NNSA Y-12 Site Office	Employee Involvement
William Schleyer	505-845-5429 <a href="mailto:bschleyer@doeal.gov">bschleyer@doeal.gov</a>	DOE NNSA Service Center	Worksite Analysis
Conni Thacker	509-373-5588 <a href="mailto:Conni_Thacker@rl.gov">Conni_Thacker@rl.gov</a>	CH2MHILL	Hazard Prevention and Control
Janie Elemdorf	509-373-3493 <a href="mailto:P_J_Elemdorj@rl.gov">P_J_Elemdorj@rl.gov</a>	CH2MHILL	Hazard Prevention and Control
Myrl Wear	816-997-3496 <a href="mailto:mwear@kcp.com">mwear@kcp.com</a>	Burns and McDonnell, Facilities Engineering Services	Observer



# Appendix B

## Correction Items

Provide written abatement for the following items:

- 1) Throughout facility: Ladderway openings need to be guarded by a one-way gate. (in work)
- 2) Maintenance spray booth: Legibly mark the safe operation zone on the manometer located on the back of the booth. (Complete)
- 3) Maintenance spray booth: Ensure that all electrical equipment (i.e.: conduit, lights, control panels, etc.) within 20 feet of the frontal opening of the booth is Class 1, Division 2 per 29CFR1910.107(c). (In compliance – Not an issue)
- 4) Sheet Metal Maintenance (aft of spray booth): Hard wire the paint mixers. (Complete)
- 5) Four press brakes were noted within the facility (one in sheet metal maintenance and three in the model shop) that requires point of operation guarding. While the use of light curtains may be the most feasible abatement option, several methods are available and were discussed with site personnel. (In Corrective Action System)
- 6) Several press brakes were noted that were actuated with a foot treadle. These foot treadles need to be guarded against accidental activation (covered), or the treadles should be replaced with enclosed foot actuator on a cord pendent. (In Corrective Action System)
- 7) Several metal shears were noted within the facility that need point of operation guarding that conform to the requirements of Table O-10 of Subpart O of 29CFR1910. (In Corrective Action System)
- 8) Several metal shears were noted that were actuated with a foot treadle. These foot treadles need to be guarded against accidental activation (covered), or the treadles should be replaced with enclosed foot actuator on a cord pendent. (In Corrective Action System)
- 9) Carpenter Shop: Install anti-kickback devices on table saw/s that are used for ripping. (On Order)
- 10) Model Shop: Fully enclose the belt and pulley drives on the pantograph. (In Corrective Action System)
- 11) Model Shop, Traverse Saw: Guard the area between the operator's station and the point of operation to prevent the operator from reaching into the point of operation when the plexiglass guard closes. A pressure sensitive mat may be a feasible abatement option. (In Corrective Action System)
- 12) Perform an assessment of the potential radio frequency hazard resulting from the antenna consolidation project on the roof. (in work)



# Appendix C

## VPP Assurance Letters

- **Department of Energy Kansas City Site Office**
- **Kansas City Plant, Honeywell, International**
- **International Association of machinists and Aerospace Workers, Lodge 778**
- **SPFPA, Local 252**

